Claims:

1. Method of preventing or treating an autoimmune disease that responds to asparagine or glutamine depletion, said method comprising the step of administering to a human patient having said autoimmune disease a therapeutically effective amount of an asparaginase or a glutaminase.

2. A method according to claim 1, wherein said asparaginase is selected from the group consisting of *E. coli*, *Wolinella succinogenes*, and *Erwinia* asparaginases.

3. A method according to claim 2, wherein said asparaginase is recombinant.

4. A method according to claim 2, wherein said asparaginase is native.

5. A method according to claim 1, wherein said glutaminase is *Acinetobacter* glutaminase.

6. A method according to claim 5, wherein said glutaminase is recombinant.

7. A method according to claim 5, wherein said glutaminase is native.

8. A method according to claim 1, wherein said autoimmune disease is selected from the group consisting of rheumatoid arthritis, systemic lupus erythematosus, and diabetes.

9. Method of preventing or treating Graft versus Host Disease, said method comprising the step of administering to a human patient having said Graft versus Host Disease a therapeutically effective amount of an asparaginase or a glutaminase.

10. A method according to claim 9, wherein said asparaginase is selected from the group consisting of *E. coli*, *Wolinella succinogenes*, and *Erwinia* asparaginases.

11. A method according to claim 10, wherein said asparaginase is recombinant.

12. A method according to claim 10, wherein said asparaginase is native.

13. A method according to claim 9, wherein said glutaminase is *Acitenobacter*.

14. A method according to claim 13, wherein said glutaminase is recombinant.

15. A method according to claim 13, wherein said glutaminase is native.